

## The greatest book you never read

There are books that everybody has heard of but few have actually read. Some are out of date, others are timeless; some are utter nonsense, others are profound. Freud's *The Interpretation of Dreams* (1899); Adam Smith's *An Inquiry Into the Nature and Causes of the Wealth of Nations* (1776); Marx's *The Communist Manifesto* (1848); Dante's *Divine Comedy* (circa 1321); Cervantes' *Don Quixote* (1605); De Tocqueville's *Democracy in America* (1835): the list is a long one. High up on the list, perhaps right at the top, is a book that was published 150 years ago this November, and took two decades to write: *The Origin of Species* (1859) by Charles Darwin.

Admit it: you have never read it, have you? I hadn't, until last year. I finally decided that I could not call myself a biologist without having at least dipped into it and, once I did, I found it a fascinating read. Although not a modern stylist—he sometimes uses words that seem to us peculiar in their context, and his sentence structure can be convoluted—Darwin writes clearly enough and his logic is impeccable. So why isn't the book more widely read?

I think one of the reasons is that most people believe they know what's in it, so why bother? It's that book about evolution, right, the one that first claimed man descended

from apes? No, it isn't. The word 'evolution' hardly appears at all in the entire book, and besides, the concept of evolution—a word the Victorians used occasionally, although they preferred 'transmutation'—was already known by 1859, thanks to several books by other natural philosophers. And there is really only a single sentence in the *Origin* on the subject of human evolution; it was not until 12 years later, in 1871, that Darwin turned explicitly to that topic in his book *The Descent of Man, and Selection in Relation to Sex*. No, *The Origin of Species* was about the mechanism of evolution—not the fact that it happened, but how it happened. The key words in the book are 'natural selection' and the entire 400 plus pages are devoted to presenting the evidence for that concept. Darwin was the one who caused evolution to become accepted by most thinking people by showing that it made sense, that the machinery driving it—natural selection—could explain a myriad of seemingly inexplicable observations in biology.

Darwin had originally wanted to call his book *An Abstract of an Essay on the Origin of Species and Varieties through Natural Selection*, but his publisher, John Murray, thought that title too boring. Instead, the title of the first edition of Darwin's disruptive classic was *On the Origin of Species by Means of Natural Selection, or The Preservation of Favoured Races in the Struggle for Life*—as un-pithy a title as you could ever hope to find. It appeared on 24 November 1859, and cost 15 shillings. The entire print run of 1,250 copies sold out on the first day.

Darwin would produce five more editions before his death, each one a considerable revision of the previous, except for the second edition of 3,000 copies, which was quickly brought out on 7 January 1860, to meet demand. In the third edition, published in 1861, Darwin added an appendix in which he discussed the reaction to his book, and traced the idea of evolution back to Aristotle. In the fifth edition, published on 10 February 1869, Darwin used the phrase "survival of the fittest" for the first time, which he borrowed from the philosopher Herbert Spencer as a more graphic way of

describing the concept of natural selection. Finally, for the sixth edition, published on 19 February 1872, he shortened the main title to *The Origin of Species* but, unfortunately, kept by *Means of Natural Selection, or The Preservation of Favoured Races in the Struggle for Life*, albeit in smaller type.

Supposing you have decided that you ought to read this great book, which version should you buy? My personal preference is for the first edition, as it represents Darwin's original, pure ideas, unsullied by second thoughts, peer pressure or critical comment. But it will set you back a bit. I know of only one copy from the original 1,250 print run currently for sale and the asking price is US\$93,000. Alternatively, you can buy a facsimile of the first edition for around US \$20, or download a copy of the sixth edition to your iPhone for 99 cents.

My recommendation, however, is *Charles Darwin: On the Origin of Species, The Illustrated Edition* (2008), edited by David Quammen—a distinguished writer and author of eleven books focused on the natural world. Quammen and the publisher (Sterling Publishing Co., Inc., New York, NY, USA) have produced a magnificent tribute to the original. Rich with illustrations of the flora and fauna that Darwin describes—the original contained only a single illustration, an amateurish hand-drawn 'tree of life'—and portraits of the people in his life, the book is also sprinkled with useful excerpts from Darwin's other works, including his *Autobiography* and *The Voyage of the Beagle*. It is the perfect way to become acquainted with the authentic voice of the greatest biologist of all time, in a context provided by one of the finest scientific writers of today. The book sells for US\$35 and is worthy of prominent display on the table in the parlour of every scientist. But do not just display it, read it. This is one little-read classic that deserves to be read.

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